

1

WHAT IS CLAIMED IS:

1 1. A method for creating and delivering a document, the method comprising the
2 steps of:

3 receiving an information request;
4 acquiring data regarding the information request;
5 extracting data using the acquired data;
6 applying a rule to the extracted data to produce result data; and
7 transmitting the result data to a location and in a manner specified by the
8 information request.

1 2. The method of claim 1, further comprising the step of formatting the
2 information request into a work item using the acquired data.

1 3. The method of claim 2, wherein the work item includes one from a group of:
2 a reference to a file;
3 a destination for the displayable result;
4 a transport mechanism that specifies how displayable result is to be delivered;
5 a rendering object for performing the extracting and applying steps;
6 a name of a server on which the rendering object is to be executed; and
7 a priority for the work item indicating an order for performing the work item
8 relative to other work items.

1 4. The method of claim 2, wherein work item is used in the step of extracting,
2 applying, processing and transmitting.

1 5. The method of claim 2, wherein step of acquiring data regarding the
2 information request includes:

3 displaying a user interface;
4 providing default values;
5 receiving input for at least one field;
6 formatting data element for queuing;
7 assembling data elements into a work item; and
8 adding the work item to a work queue.

1 6. The method of claim 2, wherein step of extracting data includes:
2 receiving and accessing the work item;
3 retrieving the acquired data from the work item;
4 using the acquired data to generate a query;
5 applying the query to the database; and
6 storing the result of the query as part of the work item.

1 7. The method of claim 2, wherein step of applying a rule to the extracted data
2 includes:
3 receiving the extracted data from a source; and

4 applying the rule to the retrieved data by performing operations specified in a
5 rendering object;
6 determining whether the extracted data is in violation of the rule; and
7 processing the work item with another rendering object if it is determined that the
8 extracted data is in violation of the rule.

1 8. The method of claim 2, wherein step of applying a rule to the extracted data
2 includes:
3 receiving the extracted data from a source;
4 applying the rule to the retrieved data by performing a database search and using
5 the results of the search as parameters in the application of the rule to the
6 extracted data;
7 determining whether the extracted data is in violation of the rule; and
8 processing the work item with another rendering object if it is determined that the
9 extracted data is in violation of the rule.

1 9. The method of claim 1, further comprising steps of:
2 receiving the result data,
3 processing the result data to produce a displayable result; and
4 wherein step transmitting the result data is the transmission of the displayable
5 result adapted for the transport medium.

1 10. A system for automating the assembly, processing and delivery of
2 documents, the system comprising:

3 a first module having a transport client for acquiring data and generating a work
 4 item;
 5 a second module for applying a business rule to the acquired data to produce
 6 result data, the second module coupled to the first module to receive the
 7 work item; and
 8 a third module for producing and transmitting a document from the result data, the
 9 third module coupled to the second module to receive the work item.

1 11. The system of claim 10, further comprising a fourth module for producing
 2 query data by applying the acquired data to a database, the input of the fourth module
 3 coupled to receive the work item from the first module, and the fourth module coupled to
 4 output the work item to the third module, and wherein the third module uses the query
 5 data as result data for producing and transmitting the document.

1 12. The system of claim 10, further comprising:
 2 a work queue for storing work items, the work queue coupled to the first module,
 3 the second module, and the third module for receiving work items; and
 4 a scheduler coupled to the work queue for processing work items, determining the
 5 status of work items and sending work items to the second module and the third module.

1 13. The system of claim 10, wherein the first module further comprises a
 2 transport client, the transport client coupled to work queue for storing work items therein,
 3 the transport client acquiring data and creating work items from the data.

1 14. The system of claim 10, wherein the second module further comprises a
2 rendering object, the rendering object coupled to the work queue for receiving work items
3 from the work queue and for storing work items into the work queue, the rendering object
4 for applying a business rule to the acquired data to produce the result data.

1 15. The system of claim 11, wherein the fourth module further comprises a
2 rendering object, the rendering object coupled to the work queue for receiving work items
3 from the work queue and for storing work items into the work queue, the rendering object
4 for generating and applying a query on a database and adding query results to the work
5 item.

1 16. The system of claim 10, wherein the third module further comprises a
2 transport object, the transport object coupled to the work queue for receiving work items
3 from the work queue, the transport object coupled to a corresponding delivery
4 mechanism for sending the document, the transport object receiving a work item,
5 converting the result data into a document suited to the delivery mechanism and
6 transmitting the document over the delivery mechanism.

7 17. The system of claim 16, further comprising:
8 a routing table having information for resource allocation, resource availability,
9 local or remote processing, and time of processing, the routing table coupled to the third
10 module; and

- 1 wherein the transport objects of the third module use the routing table to
- 2 determine a time to use and type of delivery mechanism for transmitting the document.
- 3